

ABSTRACT

An angioplasty stent comprises a body comprising a plurality of successive segments connected in pairs by bridge means so that the successive segments can be oriented relative to one another for the purposes of bending of the body in any direction defined by a linear combination of respective orientation axes defined by the bridge connection means. During the radial expansion of the stent, the axial contraction of the segments resulting from the opening-out of the respective loops is compensated by axial projection of the bridge elements from the respective concave portions. The wall of the body comprises arms for supporting a lumen as well as regions which are selectively deformable during the expansion of the stent, the arms and the selectively deformable regions having different cross-sections and/or cross-sectional areas. At least one portion of the body may have a substantially reticular structure, the branches of which define geometrical figures identifiable as fractals.